

Title (en)

POLYMER ANISOTROPIC ELECTROCONDUCTIVE GLUING MATERIAL AND A GLUING METHOD

Title (de)

ANISOTROPES ELEKTRISCH LEITENDES POLYMERKLEBEMATERIAL UND KLEBEVERFAHREN

Title (fr)

MATÉRIAU DE COLLAGE CONDUCTEUR D'ÉLECTRICITÉ ANISOTROPE ET PROCÉDÉ DE COLLAGE

Publication

EP 2014735 A2 20090114 (EN)

Application

EP 07747885 A 20070409

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- RU 2006112264 A 20060413

Abstract (en)

The invention relates to the semiconductor device making technology, namely, to methods and compositions for the technology for manufacturing semiconductor devices and integrated microcircuits, particularly to the technology for creating new adhesive electroconductive compositions. The task of the claimed invention is in providing a polymer anisotropic electroconductive composite adhesive material ensuring increased reliability of positive characteristic replication, high electroconductivity and high anisotropy in the direction perpendicular to the adhesion plane, as well as a method of adhering. The set task is solved by creating a polymer anisotropic electroconductive composite adhesive material based on dielectrics, among which the necessary component ensuring high anisotropy are agents having unstable electron molecular state, which electroconductivity depends on action of external physical fields, and which are characterized by high polarizability and/or bistable electron energy structure with regard to the process of excess electron capture. Other components carry out important, but ancillary functions (e.g., increasing of strength, adhesion, workability, etc.). Novelty is in that such a polymer composite material is created based only on dielectrics, among which must be necessary components having features represented above.

IPC 8 full level

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CPC (source: EP)

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